

## INERTIAL OSCILLATOR CONTROL SYSTEM

### ABSTRACT

This invention relates to a mechanical oscillator control system yielding a force output for lifting a gravity payload. The oscillator system consists of an unbalanced inertial rotor or rotors constrained to orbit while undergoing strong radial motions. The rotor is rotateably connected to a moveable platform via a planetary gear orbiting about a fixed sun gear of equal size. The resulting oscillator generates strong coriolis forces that combine as compound forces with the centrifugal forces to generate a net alternating force on the platform. These forces are then coupled to a gravity payload via a mechanical clutch acting when the forces are upward, with platform re-positioning using a crank-spring mechanism. The load is lifted, and by gimbal vectoring, lateral motion is also achieved.

This application was originally filed as a provisional application on June 22, 2000 and had an application number 60/213,449.